

# Search Techniques

## Practical Tips



REGIONAL OFFICE FOR THE

**World Health  
Organization**

**Western Pacific**



# Keyword Search

- will retrieve records where that word occurs in any field in any record: author, title, subject heading, publisher, notes, etc.
- can be applied to one field or to all the fields in the bibliographic record.
- useful at the beginning of a search and can help you to find a good subject heading to use.



# Subject Heading Search

- finds only the most relevant records on a subject or topic.
- retrieves only records containing the same search terms in their Subject Heading field.
- the terms in the Subject Heading field are taken from a controlled vocabulary or thesaurus, e.g. Medical Subject Headings (MeSH) for medicine and allied health sciences.

# Example of a Subject Heading

http://www.nlm.nih.gov/cgi/mesh/2006/MB\_cgi - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites

Address http://www.nlm.nih.gov/cgi/mesh/2006/MB\_cgi Go Links

## National Library of Medicine - Medical Subject Headings

2006 MeSH

[Return to Entry Page](#)

**Please select a term from list:**

- [Advance Care Planning](#)
- [Advance Health Care Planning](#)
- [Community Health Planning](#)
- [Health Facility Planning](#)
- [Planning, Health Facility](#)
- [Health Planning](#)
- [Health and Welfare Planning](#)
- [National Health Planning and Resources Development Act of 1974](#)
- [Planning, Health and Welfare](#)
- [State Health Planning, United States](#)
- [Health Planning Councils](#)
- [National Council on Health Planning and Development](#)
- [Health Planning Guidelines](#)
- [Guidelines for Health Planning](#)

Internet

start I... h... M... R... EN 08:42



# Choosing Search Terms

- Search terms must be specific or closely related to the topic of interest, such as:
  - Terms you might use when discussing the topic with a colleague, e.g. kidney disease OR renal failure
  - Terms that reflect ideas essential to your topic, e.g. treatments, cures, or side effects.
  - Alternative words and abbreviations, e.g. mri OR magnetic resonance imaging



# Search Operators

- Allow you to focus your search by linking search terms and defining the relationship between them.
- Some operators take precedence over others when searching a database.
- Not functional when they are at the beginning or end of a search expression.

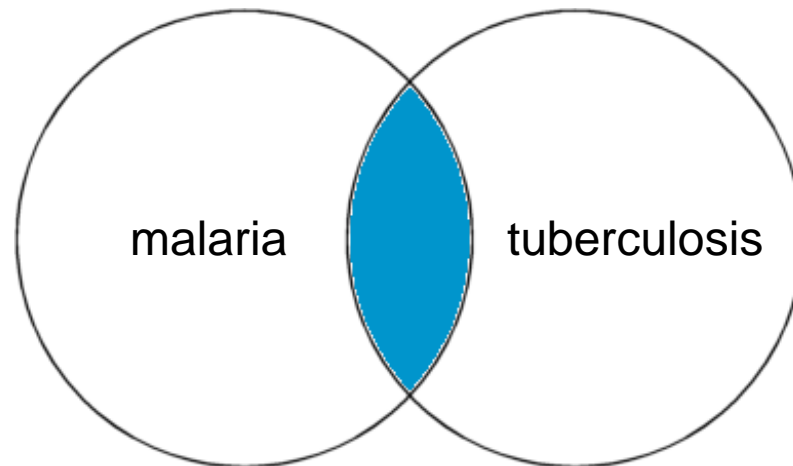


# Boolean Operators

- Connect terms and locate records containing matching terms in one of the specified field, both of the specified fields, or all of the specified fields.
- Must be in UPPERCASE when used.
- **AND**, **NOT** operators are processed in a left-to right sequence. These are processed first before the **XOR** and **OR** operators.
- **XOR**, **OR** operators are also processed from left to right.

# “AND” Operator

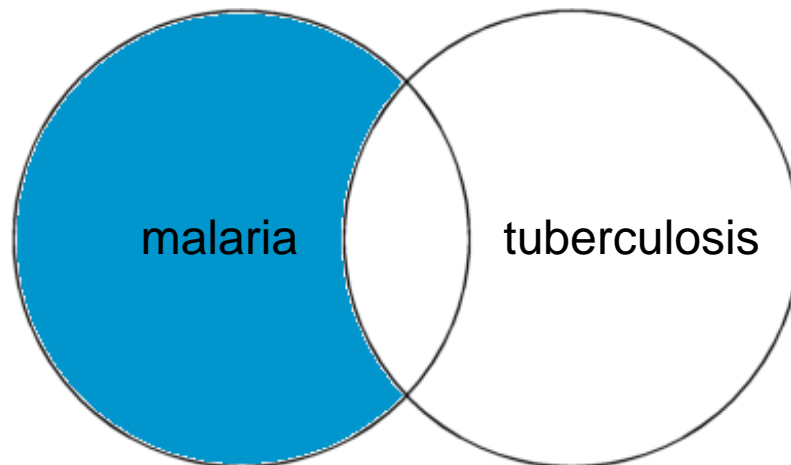
- **AND (Intersection)**  
will narrow a search; retrieves items containing all the search terms.
- *Type in:* malaria **AND** tuberculosis





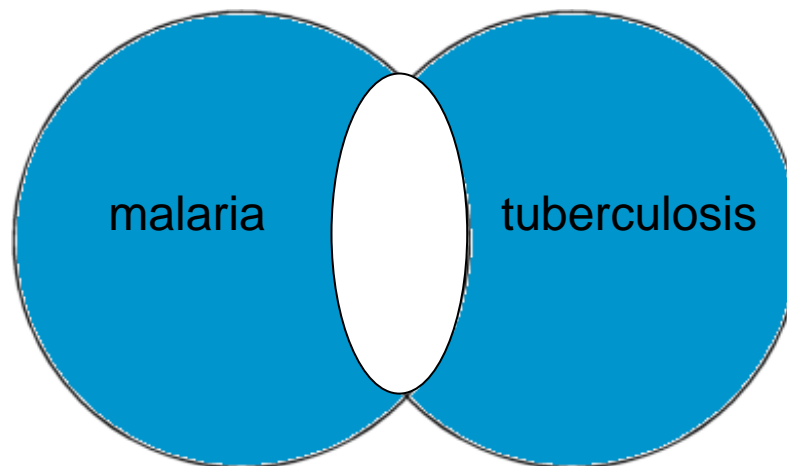
# NOT Operator

- NOT (Difference)  
will narrow a search; excludes items containing search term 2 or both search terms 1 and 2.
- *Type in:* malaria NOT tuberculosis



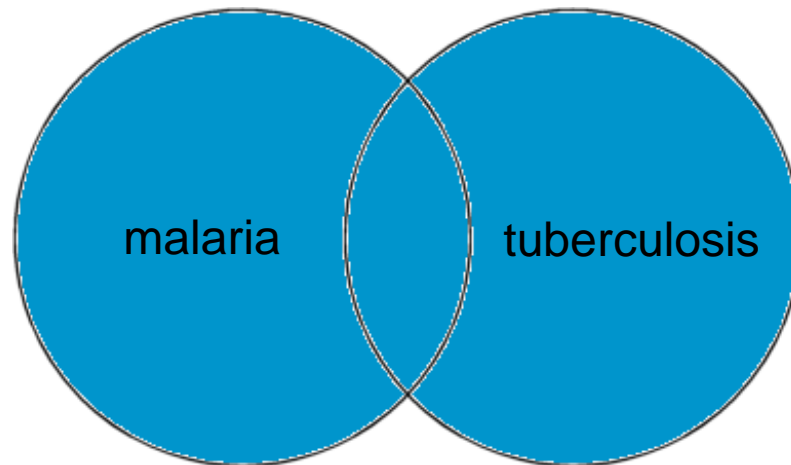
# XOR Operator

- XOR (Exclusive OR)  
will broaden a search but only retrieves items matching either search term but not both search terms.
- *Type in:* malaria XOR tuberculosis



# OR Operator

- **OR (Union)**  
will broaden a search; retrieves items containing either search term or both search terms.
- *Type in:* malaria **OR** tuberculosis



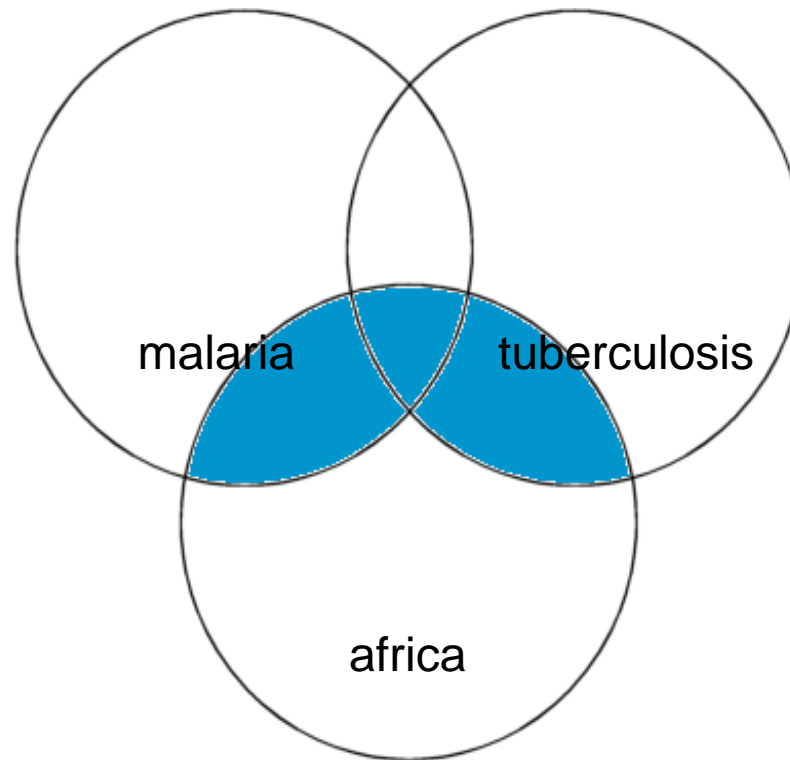


# Nesting Search Terms

- Enclosing the search terms in **parentheses** can change the sequence in which the **AND** and **OR** operators are processed in a search. The terms inside the parentheses are processed first; *i.e.* operators inside parentheses have priority over, or operate before, operators used outside parentheses.
- **Example:**  
Africa **AND** (malaria **OR** tuberculosis)

# AND, OR Operators with Nesting

- *Type in:* Africa AND (malaria OR tuberculosis)





# Phrase Searching

- Some databases allow searching of a phrase by enclosing it in **single** (WHOLIS uses single quotes) or **double quotes** (PubMed uses double quotes).
- Example: 'health promotion'

# Truncation / Wildcards

- Some database management softwares allow *root searching* or *right truncation searching* to look for a number of words or terms starting with the same letters by using a truncation symbol, such as \$, \*, !, +, etc.
- All search terms having the specified root are **ORed** together.
- **Example:**
  - Type in: **staph\$** will search for information on **staphylococcus**  
**OR** **staphylococcal** **OR** **staphylococci**
  - The **question mark (?)** can be used to substitute for characters anywhere in a word. Use one question mark for each character to be inserted, e.g. **wom?n** would search for “**woman**” and “**women**”.
  - The number of question mark should correspond to the number of letters to be added at the end of a word, e.g. **transplant??** would find “**transplanted**” and “**transplanter**”.



# Special Characters & Formulas

- Enter **subscripted** and **superscripted** characters on the same line as the other characters, e.g. the formula for water should be entered as **H<sub>2</sub>O**.
- Enter accented characters as the same characters without the accent mark.
- Certain non-alphanumeric special characters (e.g. **hyphens, brackets, asterisks, bullets, arrows, daggers, plus signs, etc.**) are treated as delimiters and are not searchable.